

CLAIMS

What is claimed:

1. A method of treating or preventing cancer in a patient comprising the steps of administering a therapeutically effective amount of a polypeptide comprising an amino acid sequence having at least 70% sequence identity to the amino acid sequence set forth in SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:7, SEQ ID NO:10, SEQ ID NO:11, SEQ ID NO:12 or SEQ ID NO:14 over the entire length of SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:7, SEQ ID NO:10, SEQ ID NO:11, SEQ ID NO:12 or SEQ ID NO:14 respectively, wherein the polypeptide may optionally comprise a fusion partner or an affinity tag, wherein administration of said polypeptide to said patient induces an immune response to a tumour antigen.
2. The method of claim 1, further comprising admixing the polypeptide with an adjuvant.
3. The method of claim 1, wherein the tumour antigen comprises CASB7439.
4. The method of claim 1, wherein the patient has or has a potential to contract a cancer comprising colorectal, breast or lung cancer.
5. The method of claim 1, wherein the polypeptide has at least 95% sequence identity to SEQ ID NO:2.
6. A method of inducing an immunoresponse to CASB7439 in a human or non-human animal comprising administering a peptide fragment of SEQ ID NO:2 to the human or non-human animal.
7. The method of claim 6, wherein the peptide fragment is selected from the group consisting of SEQ ID NO: 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, and 33.
8. The method of claim 6, wherein the peptide fragment further comprises a fusion partner.

9. The method of claim 6 or 8, further comprising admixing the peptide fragment with an adjuvant.

10. A method of manufacturing a medicament for immunotherapeutically treating a patient suffering from or susceptible to cancer comprising expressing a protein in a cell comprising a polynucleotide comprising a nucleotide sequence which has at least 70% sequence identity to the nucleotide sequence set forth in SEQ ID NO:1 over the entire length of SEQ ID NO:1.

11. The method according to claim 10, wherein the polynucleotide has at least 95% sequence identity to SEQ ID NO:1.

12. The method according to claim 10, wherein the patient is suffering from a cancer comprising colorectal, breast or lung cancer.

13. The method according to claim 10, wherein the polynucleotide is selected from the group consisting of

- (a) a polynucleotide comprising a nucleotide sequence encoding SEQ ID NO:2;
- (b) the coding region of polynucleotide SEQ ID NO:1; and
- (c) a polynucleotide obtainable by screening an appropriate library under stringent hybridization conditions with a labeled probe having the sequence of SEQ ID NO:1 or a fragment thereof, wherein said polynucleotide encodes a polypeptide having similar properties to those of SEQ ID NO:2.

14. A method of manufacturing a medicament comprising a polypeptide which has at least 70% sequence identity to the amino acid sequence set forth in SEQ ID NO:2 over the entire length of SEQ ID NO:2 for the manufacture of a medicament for immunotherapeutically treating a patient suffering from or susceptible to cancer.

15. The method according to claim 14, wherein the polypeptide has at least 95% sequence identity to SEQ ID NO:2.

16. The method according to claim 14, wherein the patient is suffering from a cancer comprising colorectal, breast or lung cancer.

17. An immunogenic fragment of CASB7439, wherein the immunogenic fragment is immunologically reactive with an antibody that binds to and/or a T-cell that reacts with or binds to a polypeptide comprising SEQ ID NO:2.

18. A pharmaceutical composition comprising the immunogenic fragment of claim 17.

19. A polypeptide comprising the amino acid sequence set forth in SEQ ID NO:35.

20. An isolated polynucleotide encoding the polypeptide of claim 19.

21. An expression vector comprising the polynucleotide of claim 20.

22. A host cell comprising the expression vector of claim 21.